## CLAIMS

What is claimed is:

1) A device suitable for implantation in a living being, said device comprising an at least partially crystalline polymer material, said polymer material comprising a plurality of zones having polymer molecular orientation and cross section, wherein at least one zone is more highly oriented than at least one other zone.

2) The device of claim 1, wherein said polymer material comprises a resorbable polymer.

3) The device of claim 2, wherein said resorbable polymer is selected from the group consisting of PLA, PGA, PGA/PLLA, DLPLA, and combinations thereof.

4) The device of claim 1 further comprising additive materials selected from the group consisting of ceramics, fibrous materials, particulate materials, biologically active agents, plasticizers and combinations thereof.

5) A method for the manufacture of a device suitable for implantation in a living being, said method comprising the steps of:

a) providing a polymer slug, barrel, die cavity tooling, and ram press, wherein said die cavity tooling defines a die shape;

b) placing said polymer slug between said ram press and die cavity tooling;

c) actuating said ram press in order to apply pressure upon said polymer slug, thereby forcing said polymer slug to conform to said die shape, wherein said polymer slug is formed into a device comprising zones of variable alignment of the polymer structure, and zones of varying cross-section; and

d) removing said device from said die cavity tooling.

6) The method of Claim 5, further comprising the step of:

e) machining said device to a finished product.

7) The method of claim 5, wherein prior to ram press actuation, said polymer slug is heated to a temperature having a lower range about a glass transition temperature and an

upper range about a melting temperature of the polymer, before said polymer slug is forced to conform to said die shape.

8) The method of claim 7, wherein said heating creates a temperature gradient in said polymer slug, die cavity tooling and barrel.

9) The method of claim 7, wherein prior to removing said device from said die cavity tooling, said device is reheated and allowed to cool.

10) The method of claim 5, wherein said polymer slug comprises a resorbable polymer.

11) The method of claim 10, wherein said resorbable polymer is selected from the group consisting of PLA, PGA, PGA/PLLA, DLPLA, and combinations thereof.

12) The method of claim 5, wherein said polymer slug provided further comprises additive materials.

13) The method of claim 12, wherein said additive materials are selected from the group consisting of ceramics, fibrous materials, particulate materials, biologically active agents, plasticizers and combinations thereof.

14) The method of claim 5, wherein said die cavity tooling comprises a head portion and a shank portion, wherein said head portion has a larger cross section than said shank portion.

15) The method of claim 5, wherein said die cavity tooling is temperature controlled.

16) The method of claim 5, wherein said barrel is temperature controlled.

17) The method of claim 5, wherein said ram press further comprises complex geometry.

18) The method of claim 5, wherein said die cavity tooling is not unitary but rather comprises a plurality of pieces capable of fitting together.

19) The method of claim 5, wherein said polymer slug further comprises complex geometry.

20) The method of claim 5, wherein said die cavity tooling further comprises an ejection pin.

21) The method of claim 20, wherein said ejection pin serves to form an end of said polymer slug.

22) A method for the manufacture of a device suitable for implantation in a living being, said method comprising the steps of:

a) providing a polymer slug, die cavity tooling, and ram press, wherein said die cavity tooling defines a die shape;

b) placing said polymer slug between said ram press and die cavity tooling;

c) actuating said ram press in order to apply pressure upon said polymer slug, thereby forcing said polymer slug to conform to said die shape, wherein said polymer slug is formed into a device comprising zones of variable alignment of the polymer structure, and zones of varying cross-section;

d) removing said device from said die cavity tooling;

e) placing said device between said ram press and a second die cavity tooling, wherein said second die cavity tooling defines a second die shape;

f) actuating said ram press in order to apply pressure upon said device, thereby forcing said device to conform to said second die shape, wherein said device is formed into a twice pressed device comprising zones of increased alignment of the polymer structure, and zones of varying cross-section.

23) A device suitable for implantation in a living being, said device comprising zones of variable alignment of the polymer structure, and zones of varying cross-section, and wherein said device is made by the process of:

a) providing a polymer slug, barrel, die cavity tooling, and ram press, wherein said die cavity tooling defines a die shape;

b) placing said polymer slug between said ram press and die cavity tooling;

c) actuating said ram press in order to apply pressure upon said polymer slug, thereby forcing said polymer slug to conform to said die shape, wherein said polymer slug is formed into said device comprising said zones of variable alignment of the polymer structure, and said zones of varying cross-section; and

d) removing said device from said die cavity tooling.

24) The device made by the process of Claim 23, the process further comprising the step of:

e) machining said device to a finished product.

25) The device made by the process of Claim 23, wherein prior to ram press actuation, said polymer slug is heated to a temperature having a lower range about a glass transition temperature and an upper range about a melting temperature of said polymer slug before said polymer slug is forced to conform to said die shape.

26) The device of claim 25, wherein said heating creates a temperature gradient in said polymer slug, die cavity tooling and barrel.

27) The device of claim 25, wherein prior to removing said device from said die cavity tooling, said device is reheated and allowed to cool.

28) The device made by the process of Claim 23, wherein said polymer slug comprises a resorbable polymer.

29) The device of claim 28, wherein said resorbable polymer is selected from the group consisting of PLA, PGA, PGA/PLLA, DLPLA; and combinations thereof.

30) The device made by the process of Claim 23, wherein said polymer slug provided further comprises additive materials.

31) The device of claim 30, wherein said additive materials are selected from the group consisting of ceramics, fibrous materials, particulate materials, biologically active agents, plasticizers and combinations thereof.

32) The device made by the process of Claim 23, wherein said die cavity tooling comprises a head portion and a shank portion, wherein said head portion has a larger cross section than said shank portion.

33) The device made by the process of Claim 23, wherein said die cavity tooling is temperature controlled.

34) The device made by the process of Claim 23, wherein said barrel is temperature controlled.

35) The device made by the process of Claim 23, wherein said ram press further comprises complex geometry.

36) The device made by the process of Claim 23, wherein said die cavity tooling is not a single piece but rather comprises a plurality of pieces capable of fitting together.

37) The device made by the process of Claim 23, wherein said polymer slug further comprises complex geometry.

38) The device made by the process of Claim 23, wherein said die cavity tooling further comprises an ejection pin.

39) The device of claim 38, wherein said ejection pin serves to form an end of said polymer slug.